

**REMARKS**

By this amendment, claims 1 and 19 have been amended, and claims 26-29 have been added. These amendments are made to even more clearly recite the claimed invention, do not add prohibited new matter and are fully supported by the specification. Reconsideration and withdrawal of the rejections set forth in the outstanding Office Action are respectfully requested in view of the following remarks.

**Interview Summary**

Applicants thank Examiner Vincent for his courtesy in conducting a telephone interview with Applicants' representative, Azza Jayaprakash, on March 21, 2008. During the interview, Applicants' representative discussed the rejections in the outstanding Office Action. Applicants thank Examiner Vincent for taking time to discuss the Final Office Action with Applicants' representative. For the record, Applicants submit that the Examiner Interview Summary Record, issued, April 4, 2008, sets forth the full substance of the interview.

**Claim Rejections under 35 U.S.C. § 112, second paragraph**

The Office Action rejects claims 1 and 19 under 35 U.S.C. § 112, second paragraph, as allegedly being incomplete for omitting essential steps. Specifically, the Examiner asserted that it unclear how the claimed invention determines when a document is misrouted. Without agreeing with or acquiescing to the rejection, Applicants note that the claims have been amended to address the Examiner's concerns. Applicants respectfully request withdrawal of the outstanding rejections under 35 U.S.C. § 112, second paragraph.

**Claim Rejections under 35 U.S.C. § 103(a)**

The Office Action maintains the rejection of claims 1, 9, 13, 14, 19-24 under 35 U.S.C. § 103(a) over Masand et al. (U.S. Patent No. 5,251,131, hereinafter “MASAND”) in view of Mathias et al. (U.S. Patent No. 6,480,627, hereinafter “MATHIAS”) and further in view of Kamel et al. (U.S. Patent No. 5,937,037, hereinafter “KAMEL”). Claims 2 and 4 are also rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of MASAND, MATHIAS, and KAMEL in view of Tan (“Learning User Profiles for Personalized Information Dissemination,” hereinafter “TAN”). Furthermore, the Office Action rejects claim 3 under 35 U.S.C. § 103(a) as being unpatentable over the combination of MASAND, MATHIAS, KAMEL, TAN in view of TAN2 (“Cascade ARTMAP: Integrating Neural Computation and Symbolic Knowledge Processing,” hereinafter “TAN2”). Lastly, claims 10-12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of MASAND, MATHIAS, and KAMEL in view of Register (U.S. Patent No. 5,371,807, hereinafter “REGISTER”).

Initially, Applicants note that the claims recite (using claim 1 as a non-limiting example):

A computer implemented document classification apparatus, comprising:  
a classifier, comprising a document classifier and an adaptive resonance associative map (ARAM) classifier, that processes the document based on extracted features in a knowledge acquisition mode in which an association of a classification with each document is incrementally added to a knowledge base and in a document classification mode in which the ARAM classifier, using the knowledge base, determines a predicted classification for the document; and  
a router that is configured to route the document to one of a plurality of destinations based upon the classification associated with a confidence value, and is configured to compare the confidence value to a threshold value;  
wherein the classifier is configured to correctly classify a misrouted document by switching between the document classification mode and the knowledge acquisition mode based upon a learn instruction, an insert instruction, or a classify instruction, inputted by the user;  
wherein, when the confidence value exceeds the threshold value, the document is routed to a destination specified by the predicted classification for automatic routing without the user inputting classification rules for the document; and

wherein, when the confidence value does not exceed the threshold value, the document is determined to be a misrouted document and the user determines the correct classification of the document and the document is forwarded with the correct classification to a learning module; and

wherein, when the learning module determines a contradiction between the predicted classification and the correct classification, the learning module revises the knowledge base automatically without the user inputting classification rules for the document.

Without agreeing with or acquiescing to the previous rejections, Applicants note that the claims have been amended to clarify certain features of the claimed invention. Applicants submit that the cited publications fail to disclose or render obvious all of the elements of the claimed invention. For example, the primary reference in the rejection, MASAND, teaches that each misrouted document (or incorrect classification prediction) would require that a system administrator to *manually encode a new rule* to correctly route document (see MASAND, col. 6, lines 12-24). In contrast, the claimed invention recites that “the learning module revises the knowledge base automatically without the user inputting classification rules for the document.” Thus, MASAND fails to disclose, *inter alia*, this feature of the claimed invention, and the other cited publications fails to cure the deficiencies of MASAND. For this reason alone, Applicants submit that all of the elements of the claimed invention are neither disclosed nor render obvious by the cited publication, and respectfully request withdrawal of the outstanding rejections.

Furthermore, Applicants note that newly added claims 28 and 29, respectively, recite that “the ARAM classifier is configured to ensure that a correctly classified document cannot be later determined to be a misrouted document” and “when a rule input by the user contradicts a previous rule in the knowledge base, the ARAM classifier executes the previous rule in the knowledge base in order to avoid inconsistent classifications.” In contrast, in MASAND, it appears that when entering a new rule to correct a most recently misrouted document, the system

administrator may inadvertently cause some other previously correctly-routed documents to be misrouted if they were to be submitted to MASAND's system again. In contrast with the claimed invention, there is nothing in MASAND that teaches or even suggests that the system in MASAND is capable of determining when there is conflict between rules entered by the system administrator and previous rules in knowledge base, or taking effective remedial action as in the claimed invention. MASAND merely teaches automatic moderation of the weightings of the rule, as discussed in column 6, lines 26-46, of MASAND). Thus, MASAND fails to teach this feature of the claimed invention, and the other cited publications fails to cure the deficiencies of MASAND. For these reasons, Applicants submit that the cited publications fail to disclose or render obvious the features of claimed invention, and respectfully request withdrawal of the outstanding rejections.

**SUMMARY AND CONCLUSION**

In view of the foregoing, it is submitted that the Examiner's rejections should be withdrawn. Entry and consideration of the present amendment, reconsideration of the outstanding Office Action, and allowance of the present application and all of the claims therein are respectfully requested and are believed to be appropriate.

Although it is within the discretion of the Examiner to enter amendments made after a Final Office Action, Applicants submit that the present amendments do not raise new issues, and should not necessitate a new search, as the claim amendments clarify that which was argued in the last filed response. Therefore, Applicants respectfully request that the Examiner enter the present response. Applicants have made a sincere effort to place the present invention in condition for allowance and believe that they have now done so.

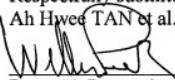
Applicants note that this amendment is being made to advance prosecution of the application to allowance, and should not be considered as surrendering equivalents of the territory between the claims prior to the present amendment and the amended claims. Further, no acquiescence as to the propriety of the Examiner's rejections is made by the present amendment. All other amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Commissioner determine that an extension of time is required in order to render this response timely and/or complete, a formal request for an extension of time, under 37 C.F.R. §1.136(a), is herewith made in an amount equal to the time period required to render this

response timely and/or complete. The Commissioner is authorized to charge any required extension of time fee under 37 C.F.R. §1.17 to Deposit Account No. 19-0089.

Should the Examiner have any questions, please contact the undersigned at the telephone number provided below.

Respectfully submitted,  
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